DOCKET NO.: 277944US28X PCT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

E APPLICATION OF: Takashi KIKUKAWA, et al.

SERIAL NO: 10/519,169

GROUP: 2626

FILED:

September 16, 2005

EXAMINER:

FOR:

OPTICAL RECORDING/REPRODUCING METHOD AND OPTICAL

RECORDING MEDIUM

LETTER

Mail Stop DD Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Submitted herewith is a Chinese Office Action with English Translation for the Examiner's consideration. The reference cited therein has been previously filed on November 16, 2005.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

Fred & Brown

James J. Kulbaski

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Customer Number

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OF THE PEOPLE'S REPUBLIC OF CHINA THE PA

Lu, Haidian, Beijing Post Code: 100088

Applicant:	TDK CORPORATION; NATIONAL		
	INSTITUTE OF ADVANCED INDUSTRIAL		
	SCIENCE AND TECHNOLOGY; PIONEER		
	CORPORATION (パイオニア株式会社);		
	SHARP KABUSHIKI KAISHA (SHARP		
	CORPORATION) シャ-ブ株式会社;	,	
	SAMSUNG JAPAN CORPORATION		
Attorney:	FU JIANJUN	Date of Notification:	
Application No.:	03817344.1	Date: 10 Month: 11 Year: 2006	
Title of the Invention:	METHOD FOR OPTICALLY RECORDING AND REPRODUCING		
	DATA AND OPTICAL RECORDING	G MEDIUM	

Notification of the First Office Action

		(PC	T Applicati	on in the N	ational P	Phase)			
above-ide Republic □ The Chi	entified par of China (tent applica (hereinafter t Office has	tion for inven referred to as	tion under A "the Patent	rticle 35(1 Law").	l) of the	Patent	trried out on the Law of the People's tative under Article	
2. ⊠ The app	licant clair	med priority	y/priorities ba	sed on the ap	plication((s):		7 1 40 00:00	
filed in_	<u> </u>	on	June 24, 2002	2, filed in	ı	JP	_on _	Feb. 19, 2003	
filed in		on		, filed in	1		_on _	•	
3. ☐ The foll Law:	owing ame	endments s	ubmitted by th	ne applicant a	re not acc	ceptable 1	under .	Art. 33 of the Patent	
	Chinese tr	anslation o	f the amendme	ents annexed	to the IPI	EA Repo	rt.		
			f the amendme						
			ider Art. 28 or						
								e Patent Law.	
Specific reason	ons why th	e amendme	ents are not ac	ceptable are	set forth in	n the text	t porti	on of this Notification.	-
4 □Evaminat	ion was di	rected to th	e Chinese trar	elation of th	a Intarnati	ional An	nlicati	on as originally filed.	
			he application					on as originally flied.	
								ion as originally filed.	
	□ Pag	esof	the Chinese to	ranslation of	the amend	dments a	nnexe	d to the IPEA Report.	
	□ Pag	esof	the amendme	nts made und	der Art. 28	or Art.	41 of I	PCT.	
	☐ Pag	esof	the amendme	nts made und	ier Rule 5	l of the	Impler	menting Regulations o	f
		Patent Lav							
⊠Claims								on as originally filed	i.
	☐ The (Chinese trai	islation of cla	imsof	the amend	dments n	nade u	inder Art. 19 of PCT.	
								d to the IPEA Report.	
	of Po		isiation of cia	imsoi	the amend	aments n	nade u	inder Art. 28 or Art. 41	
			s of the claims	s made	under Ru	ile 51 of	the Im	nlementing	
			the Patent Lav		under ita	5 . 01		.p.o6	
⊠Drawings					the Intern	ational A	Applica	ation as originally filed	đ.
J								to the IPEA Report.	
			he amendmen						
	⊠ Pages	s 12 submit	ted on March	14. 2005					

5. Below is/are the reference(s) cited in this Office Action (the reference number(s) will be used throughout the examination procedure):

No.	Number(s) or Title(s) of Reference(s)	Date of Publication				
		(or the filing date of conflicting application)				
1	JP6-262854A	Date: 20 Month: 09 Year: 1994				
	6. Conclusions of the Action: Filed Nov 16, 2005					
	On the Specification:	adan Anti-ta 6 a6aha Datan Tana				
	The subject matter contained in the application is not patentable up. The description does not comply with Article 26 paragraph 3 of the	Detact I am				
	Fig. 1 does not comply with Rule 19 of the Implementing Regulation	e ratent Law.				
	On the Claims:	ons.				
	Claim(s) is/are not patentable under Article 25 of the Patent	Law				
Ċ	Claim(s) does/do not comply with the definition of invention of the Implementing Regulations.	ns prescribed by Rule 2 paragraph 1				
		2 management 2 afaba Datama I				
	Claim(s) & does/do not possess the novelty as required by Article 2 Claim(s) does/do not possess the inventiveness as required Patent Law.	by Article 22 paragraph 3 of the				
	Claim(s) does/do not possess the practical applicability as rethe Patent Law.	equired by Article 22 paragraph 4 of				
r	Claim(s) does/do not comply with Article 26 paragraph 4 of	the Patent I aw				
Ē	Claim(s) does/do not comply with Article 31 paragraph 1 of	the Patent Law				
Þ	Claim(s) 1 does/do not comply with the provisions of Rules 20-23	of the Implementing Regulations				
	Claim(s) does/do not comply with Article 9 of the Patent La	W.				
	Claim(s) does/do not comply with the provisions of Rule 12	paragraph 1 of the Implementing				
	Regulations.					
T	he explanations to the above conclusions are set forth in the text port	ion of this Notification.				
7. In	view of the conclusions set forth above, the Examiner is of the opinion	on that:				
	The applicant should make amendments as directed in the text portion	on of the Notification.				
⋈	The applicant should expound in the response reasons why the	e application is patentable and make				
	amendments to the application where there are deficiencies as po	pinted out in the text portion of the				
	Notification, otherwise, the application will not be allowed.					
	The application contains no allowable invention, and therefore, if th					
_	reasons to prove that the application does have merits, it will be reje	ected.				
	6.11					
8. In	e followings should be taken into consideration by the applicant in m	aking the response:				
(1)	Under Article 37 of the Patent Law, the applicant should respond to	to the office action within $\underline{4}$ months				
	counting from the date of receipt of the Notification. If, without any	justified reason, the time limit is not				
	met, the application shall be deemed to have been withdrawn.	the manifeles of Auti-1- 22 - falls				
(2)	Any amendments to the application should be in conformity with Patent Law. Substitution pages should be in duplicate and the form	the provisions of Article 33 of the				
	conformity with the relevant provision contained in "The Examination	nat of the substitution should be in				
(3)	The response to the Notification and/or revision of the application	should be mailed to or handed over				
(3)	to the "Reception Division" of the Patent Office, and documents	not mailed or handed over to the				
	Reception Divisions have no legal effect.	not maned of manded over to the				
(4)	Without an appointment, the applicant and/or his agent shall not	interview with the Examiner in the				
	Patent Office.	mici view with the Examiner in the				
	s Notification contains a text portion of 1 pages and the following at	tachments:				
\boxtimes	1 cited reference(s), totaling 5 pages.					
Exa	mination Dept. 3 Examiner: QIAO Dongfeng	Seal of the Examination Department				

Text of the Notification of the First Office Action

CN Application No. 03817344.1

The present application relates to an optical data recording method and medium. As described in the description, the technical problem to be solved by the present application is "to record and reproduce a recording mark train including a recording mark having a size nearly equal to the resolution limit determined by the diffraction of light or smaller than the resolution limit". After examination, the examiner presents the following comments:

- 1. Claim 1 lacks essential technical features necessary for achieving the object of the invention and thus does not comply with Rule 21.2 of the IRCPL. The technical problem to be solved by the invention is to record and reproduce the recording mark having a length shorter than 0.37λ/NA (as claimed in Claim 1). As described in the description (see from Page 11 Line 11 to Page 12 Line 11 of the description), in order . to record and reproduce such a recording mark, "when data are to be recorded in the optical recording medium...AgOx is decomposed into Ag and x/2*O2 in the noble metal oxide layer 4 constituted by AgOx, and the light absorption layer 5 is crystallized. The oxygen gas generated when data are to be recorded expands in the noble metal oxide layer 4, thereby deforming the noble metal oxide layer 4 and pushing the second dielectric layer 32 and the light absorption layer 5 up...". That is to say, in order to achieving recording, the existence of the second dielectric layer and the light absorption layer is necessary; otherwise, the readable recording mark having a length shorter than 0.37λ/NA cannot be obtained. The applicant shall recite in Claim 1 technical features relating to the second dielectric layer and light absorption layer and the recording processes and principles based on this structure (especially deformation of the second dielectric layer and the light absorption layer).
 - 2. The technical solution of Claim 1 is unclearly defined and thus does not comply with Rule 20.1 of the IRCPL. The expression "irreversibly depositing noble metal particles in the noble metal oxide layer" in Claim 1 is unclear in terms of the

meaning, because the noble metal particles do not exist in the recording medium

before recording and they are generated by decomposition of the metal oxide during

recording, but the above expression seems to say that the metal particles are added

from the outside. Therefore, the applicant shall re-draft this expression according to

the disclosure contained in the description so as to clearly and correctly define the

technical solution.

3. Claim 8 does not possess novelty as required by Article 22.2 of the CPL.

Claim 8 claims an optical recording medium, while Reference 1 (JP6-262854A) has

disclosed an optical recording medium and has specifically (see Paragraphs [0018],

[0025] and [0026] of the description) revealed the following technical features:

comprising a recording layer that is constituted as a platinum oxide and/or gold oxide

(i.e. noble metal oxide). Therefore, Reference 1 has disclosed all the technical

features of Claim 8. And both the technical solution disclosed by Reference 1 and the

technical solution as claimed in Claim 8 pertain to the same technical field and can

create the same technical effect. Therefore, the technical solution as claimed in Claim

8 does not possess novelty as required by Article 22.2 of the CPL.

4. Fig.1 of the present application is not clear enough to clearly discriminate

details of the figure, which does not comply with the provision of Rule 19.2 of the

IRCPL. The applicant shall re-submit a figure that satisfies the above provision.

Due to the reasons above, the present application cannot be patented based on

the present application document. If the applicant amends the application document

in accordance with the above comments and overcomes the existed defects, the

application has a prospect to be granted a patent right. The amendment to the

application document shall be in line with Article 33 of the CPL, not going beyond the

scope of the disclosure contained in the initial description and claims.

Examiner: QIAO Dongfeng

Code: 3611

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中华人民共和国国家知识产权局

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邮政编码: 100037	45 - 53 + 15
北京市阜成门外大街2号万通新世界广场8层	发文日期
中国国际贸易促进委员会专利商标事务所	
付建军	- Comment of the
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	一年 美 巴 沙
申请号: 038173441	THE REPORT OF THE PARTY OF THE
中津上下及株子人社社会学生工艺工艺工艺工艺工艺工艺	107) 万草
申请人: TDK 株式会社,独立行政法人产业技术综合研究所,日本先锋公司,,	
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发明创造名称:光学地记录和再现数据的方法和光学记录媒体	
·	
第一次审查意见通知书	
(进入国家阶段的 PCT 申请)	
· ·	
1. ☑应申请人提出的实审请求,根据专利法第35条第1款的规定,国家经 进行实质审查。	知识产权局对上述发明专利申请
□根据专利法第 35 条第 2 款的规定,国家知识产权局专利局决定自行 2. ☑申请人要求以其在:	对上述发明专利申请进行审查。
	I- C
- JI' 专利局的申请日 2002年 06 月 24 日为优先 步利局的申请日 2003 年 02 月 19 日为优先	权日,
专利局的申请日 年 月 日为优先权 3.□申请人于 <u>年 月 日</u> 提交的修改文件,不符合专利法实施细则	
申请人提交的下列修改文件不符合专利法第 33 条的规定。	第 51 条的规定。
□国际初步审查报告附件的中文译文。	
□依据专利合作条约第 19 条规定所提交的修改文件的中文译文。	
□依据专利合作条约第 28 条或 41 条规定所提交的修改文件。	•
4. □审查是针对原始提交的国际申请的中文译文进行的。	
☑审查是针对下述申请文件进行的:	
☑说明书 第 <u>1-30</u> 页,按照原始提交的国际申请文件的中文i	泽文:
第页,按照国际初步审查报告附件的中文译文	
第页,按照依据专利合作条约第 28 条或 41 条	· 规定所提交的修改文件:
	所提交的修改文件。
☑权利要求 第 1-8 项,按照原始提交的国际申请文件的中文	译文;
第项,按照依据专利合作条约第 19 条规定所	提交的修改文件的中文译文。
第项,按照国际初步审查报告附件的中文译文	
第项,按照依据专利合作条约第 28 条或 41 条	K所提交的修改文件;
第	所提交的修改文件。
□□□□□□□□ ☑附图 第1-11, 13, 14页, 按照原始提交的国际由请文件的由于	
第页,按照国际初步审查报告附件的中文译文第	
第页,按照依据专利法实施细则第 51 条规定	阶 提交的修改文件。

1

			
		2页,按2005年3月14	
	✓本通知÷	引用下述对比文献(其	编号在今后的审查过程中继续沿用):
	编号	文件号或名称	公开日期(或抵触申请的申请日)
	1	JP6-262854A	1994-9-20
5.	审查的结论性意	· 见	
	关于说明书:		
		引于专利法第5条规定的	为不授予专利权的范围。
	□说明书不符合	专利法第26条第3款	的规定。
	□说明书不符合	专利法第 33 条的规定	
	□说明书的撰写	不符合专利法实施细贝	J第 18 条的规定。
	✓ 说明书附图 1	不符合专利法实施细贝	J第 19 条的规定。
	关于权利要求书	§:	
	夕 权利要求	8 不具备专利法第 2	2条第2款规定的新颖性。
	【权利要求	不具备专利法第 2	2条第3款规定的创造性。
[权利要求	不具备专利法第 2	2条第4款规定的实用性。
	权利要求		条规定的不授予专利权的范围。
ļ			6条第4款的规定。
	权利要求		I 条第 I 款的规定。
	权利要求	不符合专利法第 3	
ļ	型权利要求		细则第 13 条第 1 款的规定。
			[细则第2条第1款关于发明的定义。
	✓ 权利要求		细则第 20 条的规定。
1	☑权利要求	不符合专利法实施	细则第 21 条的规定。
1	权利要求		[细则第 22 条的规定。
ļ	型权利要求	个付合专利法实施	细则第 23 条的规定。
L	→ <u>———</u> 上法体公州会 [11 的目体八七 [1] 大海 for t	おんて ナカハ
6 :	工处结化性思力	见的具体分析见本通知 ³ 意见,审查员认为:	的此义部分。
ر. آ	至 1 上处纪比性 1 由语 1 应按照	思光,甲基贝贝 人 : 通知共正文部丛坦山的	要求,对申请文件进行修改。
ŀ	7由请人应该点	四阵法士由公法甘夫利	安尔, 对中语文件进行修改。 申请可以被授予专利权的理由,并对通知书正文部分中指出的
5	い なない でんかん でんしゅう かんかん かんしゅう かんしゅう かんしゅう かんしゅう かんしゅう かんしゅう かんしゅう しゅう しゅう しゅう しゅう しゅう しゅう しゅう しゅう しゅう	进行修改,否则将不能抗	中间的 5 被投了 4 列权的建田,升利通知节止义部分中指出的 4 3 4 到 初
Г	一专利由语中沿	有可以被授予专利权的	实员性内容,如果申请人没有陈述理由或者陈述理由不充分,
<u>֓</u>	其申请将被驳回		大灰区的谷,如木中间八仅有际处理田以有陈处理田小允分,
ŕ		•	
7.	申请人应注意下	述事项:	
(1)	根据专利法第3	7条的规定,申请人应在	收到本通知书之日起的肆个月内陈述意见,如果申请人无正当
Ŧ	里由逾期不答复	,其申请将被视为撤回。	1007年2017年1月1日 100年1月1日 100年1日 1
(2)	申请人对其申请	的修改应符合专利法第	33条的规定,修改文本应一式两份,其格式应符合审查指南的
1	9 关规定。		
(3)	申请人的意见陈	述书和 / 或修改文本应	邮寄或递交国家知识产权局专利局受理处,凡未邮寄或递交给
Š	总理处的文件不 ,	具备法律效力。	
(4)	未经 预约,申请人	入和/或代理人不得前来	国家知识产权局专利局与审查员举行会晤。
8.本	通知书正文部分	分共有 1 页,并附有下	√述附件:
þ	451用的对比文	件的复印件共_1_份_	<u>5</u> 页。
L		-	

审查员: 乔东峰(3611) 2006年10月22日



审查部门

通信审查部

第一次审查意见通知书正文

申请号: 038173441

本申请涉及一种光学数据记录方法与媒体,如说明书所述,本申请要解决的技术问题是"记录和再现包括具有几乎等于由光的衍射所确定的分辨极限或小于该分辨极限的尺寸的记录标记的记录标记事"。经审查,现提出如下的审查意见。

- 1. 权利要求1缺少实现发明目的的必要技术特征,不符合专利法实施细则第21条第2款的规定。本发明所要解决的技术问题是对于长度小于0. 37\/NA的记录标记也能进行记录和再现(正如该权利要求所要求的那样)。如说明书(参见第7页17行至第8页第5行)所述,为了实现这种记录标记的记录和再现,"在数据要记录在光学记录媒体中时,……贵金属氧化物层4中的AgO,被分解为Ag和O₂,并且光吸收层5结晶。在要记录数据时产生的氧气在贵金属氧化物层4膨胀,由此使贵金属氧化物层4变形并朝上推第二电介质层32和光吸收层5。……",也就是说,为了实现记录,第二电介质层和光吸收层的存在是必需的,否则并不能得到所述的长度小于0. 37\/NA的可读取的记录标记。申请人应当在该权利要求中记载有关第二介质层和光吸收层的技术特征以及基于这种结构的记录过程和机理(特别是第二电介层和光吸收层的变形)。
- 2. 权利要求1对技术方案的表述还存在不清楚的问题,不符合专利法实施细则第 20条第1款的规定。该权利要求中所述的"将贵金属颗粒不可逆地淀积在贵金属氧化物层中"表达的技术含义不清楚,因为该记录媒体在记录之前并不存在贵金属颗粒,而是在记录过程中由金属氧化物分解产生的,而目前的表述方式似乎是从外界附加的金属颗粒。由此,申请人应当根据说明书中具体公开的内容重新撰写该技术特征,以清楚准确地表达技术方案。
- 3. 权利要求8不具备专利法第22条第2款规定的新颖性。权利要求8请求保护一种 光学记录媒体,而对比文件1已公开了一种光学记录媒体,并具体(参见说明书第 [0018、0025、0026]段)披露了如下技术特征:包括一个记录层,该记录层可由铂、 金的氧化物构成(即贵金属氧化物)。因此对比文件1已经公开了该权利要求的全部 技术特征,且对比文件1所公开的技术方案与该权利要求所要求保护的技术方案属于 同一技术领域,并能产生相同的技术效果,因此该权利要求所要求保护的技术方案不 具备新颖性。
- 4. 本申请的附图1不够清晰,致使不能清楚地分辨出该图中的各个细节,不符合 专利法实施细则第十九条第二款的规定。申请人应当重新提交符合上述规定的附图。

基于上述理出,本申请按照目前的文本还不能被授予专利权。如果申请人按照本通知书提出的审查意见对申请文件进行修改,克服所存在的缺陷,则本申请可望被授予专利权。对申请文件的修改应当符合专利法第三十三条的规定,不得超出原说明书和权利要求书记载的范围。

学系

审查员: 乔东峰

代码: 3611